

Title (en)

HLA-A\*1101-RESTRICTED WT1 PEPTIDE AND PHARMACEUTICAL COMPOSITION COMPRISING THE SAME

Title (de)

HLA-A\*1101-BESCHRÄNKTES WT1-PEPTID UND PHARMAZEUTISCHE ZUSAMMENSETZUNG DAMIT

Title (fr)

PEPTIDE WT1 À RESTRICTION HLA-A\*1101 ET COMPOSITION PHARMACEUTIQUE CONTENANT CELUI-CI

Publication

EP 2980219 A1 20160203 (EN)

Application

EP 15181734 A 20071214

Priority

- JP 2006355356 A 20061228
- EP 12164856 A 20071214
- EP 10191234 A 20071214
- EP 07850650 A 20071214
- JP 2007074146 W 20071214

Abstract (en)

The present invention relates to an HLA-A\*1101-restricted WT1 peptide, specifically, a peptide comprising an amino acid sequence consisting of 9 contiguous amino acids from a WT1 protein, wherein the peptide has an ability to bind to an HLA-A\*1101 molecule, and has an ability to induce a CTL. The present invention also relates to a peptide dimer having an ability to bind to an HLA-A\*1101 molecule and having an ability to induce a CTL, in which two peptide monomers each comprising an amino acid sequence consisting of 9 contiguous amino acids from a WT1 protein and comprising at least one cysteine residue are bound to each other through a disulfide bond. Furthermore, the present invention relates to a polynucleotide encoding the peptide, a pharmaceutical composition for the treatment and/or prevention of a cancer comprising the same and the like.

IPC 8 full level

C12N 15/12 (2006.01); A61K 31/7088 (2006.01); A61K 38/00 (2006.01); A61K 48/00 (2006.01); A61P 35/00 (2006.01); A61P 35/02 (2006.01); C07K 14/82 (2006.01); C12N 5/07 (2010.01); C12N 5/0783 (2010.01); C12N 5/0784 (2010.01); C12N 5/0786 (2010.01); C12N 5/09 (2010.01); C12Q 1/02 (2006.01); G01N 33/574 (2006.01); C12N 15/00 (2006.01)

CPC (source: EP KR US)

A61K 38/00 (2013.01 - KR); A61K 39/001153 (2018.08 - EP KR US); A61K 39/4611 (2023.05 - EP KR); A61K 39/464453 (2023.05 - EP KR); A61P 35/00 (2018.01 - EP); A61P 35/02 (2018.01 - EP); A61P 37/02 (2018.01 - EP); A61P 37/04 (2018.01 - EP); C07K 14/4748 (2013.01 - EP US); C07K 14/82 (2013.01 - KR); C12N 15/11 (2013.01 - KR); G01N 33/574 (2013.01 - EP US); A61K 38/00 (2013.01 - EP US); A61K 2039/5158 (2013.01 - US); A61K 2039/57 (2013.01 - EP US); A61K 2039/572 (2013.01 - US)

Citation (applicant)

- WO 03106682 A1 20031224 - SUGIYAMA HARUO [JP], et al
- WO 2005095598 A1 20051013 - SUGIYAMA HARUO [JP]
- JP 2006045287 A 20060216 - INAX CORP
- WO 0228414 A1 20020411 - CORIXA CORP [US], et al
- DANIEL A. HABER ET AL., CELL, vol. 61, no. 7, 29 June 1990 (1990-06-29), pages 1257 - 69
- CALL KM ET AL., CELL, vol. 60, no. 3, 9 February 1990 (1990-02-09), pages 509 - 20
- MENKE AL ET AL., INT REV CYTOL., vol. 181, 1998, pages 151 - 212
- YAMAGAMI T ET AL., BLOOD, vol. 87, no. 7, 1 April 1996 (1996-04-01), pages 2878 - 84
- INOUE K ET AL., BLOOD, vol. 91, no. 8, 15 April 1998 (1998-04-15), pages 2969 - 76
- TSUBOI A ET AL., LEUK RES., vol. 23, no. 5, May 1999 (1999-05-01), pages 499 - 505
- OKA Y ET AL., J IMMUNOL., vol. 164, no. 4, 15 February 2000 (2000-02-15), pages 1873 - 80
- MELIEF CJ ET AL., IMMUNOL REV, vol. 145, June 1995 (1995-06-01), pages 167 - 77
- RITZ J, J CLIN ONCOL, vol. 12, no. 2, February 1994 (1994-02-01), pages 237 - 8
- TSUBOI A ET AL., J CLIN IMMUNOL., vol. 20, no. 3, May 2000 (2000-05-01), pages 195 - 202
- OKA Y ET AL., IMMUNOGENETICS, vol. 51, no. 2, February 2000 (2000-02-01), pages 99 - 107
- OHMINAMI H ET AL., BLOOD, vol. 95, no. 1, 1 January 2000 (2000-01-01), pages 286 - 93
- GAO L ET AL., BLOOD, vol. 95, no. 7, 1 April 2000 (2000-04-01), pages 2198 - 203
- "Peptide Synthesis", 1966, INTERSCIENCE
- "The Proteins", vol. 2, 1976, ACADEMIC PRESS INC.
- "Peptide-Gosei", 1975, MARUZEN CO., LTD.
- "Peptide-Gosei No Kiso To Jikken", 1985, MARUZEN CO., LTD.
- "Iyakuhin No Kaihatsu (Zoku)", vol. 14, 1991

Citation (search report)

- [X] JP 2006280324 A 20061019 - UNIV EHIME
- [Y] US 2003082196 A1 20030501 - GAIGER ALEXANDER [US], et al
- [E] WO 2010037395 A2 20100408 - DAKO DENMARK AS [DK], et al
- [X] DATABASE Geneseq [online] 14 December 2006 (2006-12-14), "Human Wilms tumor-1 antigen peptide fragment SEQ ID No 30.", XP002745587, retrieved from EBI accession no. GSP:AEL42683 Database accession no. AEL42683
- [Y] VAN DRIESCHE A ET AL: "Antigen-specific cellular immunotherapy of leukemia", LEUKEMIA (BASINGSTOKE), vol. 19, no. 11, November 2005 (2005-11-01), pages 1863 - 1871, XP002565480, ISSN: 0887-6924

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2098595 A1 20090909; EP 2098595 A4 20100317; AR 064555 A1 20090408; AU 2007340679 A1 20080710; AU 2007340679 B2 20130912; BR PI0720988 A2 20140318; CA 2670658 A1 20080710; CA 2886619 A1 20080710; CA 2886620 A1 20080710; CA 2886621 A1 20080710; CA 2886622 A1 20080710; CN 101573448 A 20091104; CN 101573448 B 20120711; CN 102295682 A 20111228; CN 102302788 A 20120104; CN 102302788 B 20160615; CN 102335439 A 20120201; CN 102335439 B 20150422; CN 102659924 A 20120912; CN 102659924 B 20151125; CY 1116011 T1 20170125; DK 2341142 T3 20141208; DK 2479275 T3 20151214; DK 2479276 T3 20151221; EP 2341142 A2 20110706;

EP 2341142 A3 20110907; EP 2341142 B1 20141126; EP 2341142 B8 20150114; EP 2479275 A1 20120725; EP 2479275 B1 20151028; EP 2479276 A1 20120725; EP 2479276 B1 20151209; EP 2980219 A1 20160203; EP 2980219 B1 20181114; EP 3026115 A1 20160601; EP 3026115 B1 20170517; ES 2526425 T3 20150112; ES 2554775 T3 20151223; ES 2556831 T3 20160120; ES 2629578 T3 20170811; HK 1159686 A1 20120803; HK 1173187 A1 20130510; HK 1221252 A1 20170526; IL 199052 A0 20100328; IL 215332 A0 20111130; IL 215333 A0 20111130; IL 215334 A0 20111130; JP 5484734 B2 20140507; JP WO2008081701 A1 20100430; KR 101525261 B1 20150602; KR 20090102772 A 20090930; MX 2009007008 A 20090710; MY 161664 A 20170428; NO 20092774 L 20090727; NZ 577443 A 20111222; NZ 592509 A 20121130; NZ 592510 A 20121130; NZ 601175 A 20121221; PH 12014500902 A1 20160111; PH 12014500902 B1 20160111; PL 2341142 T3 20150430; PT 2341142 E 20150213; RU 2009128979 A 20110210; RU 2481398 C2 20130510; SG 177222 A1 20120130; SI 2341142 T1 20150331; TW 200835513 A 20080901; TW 201345544 A 20131116; TW 201630620 A 20160901; TW I417103 B 20131201; TW I554280 B 20161021; TW I599367 B 20170921; UA 103154 C2 20130925; US 2011098233 A1 20110428; US 2014134200 A1 20140515; US 2016199472 A1 20160714; US 2018064795 A1 20180308; US 8653038 B2 20140218; US 9272026 B2 20160301; WO 2008081701 A1 20080710; ZA 200903633 B 20100224

DOCDB simple family (application)

**EP 07850650 A 20071214;** AR P070105924 A 20071227; AU 2007340679 A 20071214; BR PI0720988 A 20071214; CA 2670658 A 20071214; CA 2886619 A 20071214; CA 2886620 A 20071214; CA 2886621 A 20071214; CA 2886622 A 20071214; CN 200780048749 A 20071214; CN 201110235501 A 20071214; CN 201110235503 A 20071214; CN 201110235527 A 20071214; CN 201210153918 A 20071214; CY 151100113 T 20150204; DK 10191234 T 20071214; DK 12164855 T 20071214; DK 12164856 T 20071214; EP 10191234 A 20071214; EP 12164855 A 20071214; EP 12164856 A 20071214; EP 15181734 A 20071214; EP 15201329 A 20071214; ES 10191234 T 20071214; ES 12164855 T 20071214; ES 12164856 T 20071214; ES 15201329 T 20071214; HK 12100169 A 20120106; HK 13100536 A 20120106; HK 16109237 A 20160803; IL 19905209 A 20090601; IL 21533211 A 20110922; IL 21533311 A 20110922; IL 21533411 A 20110922; JP 2007074146 W 20071214; JP 2008552080 A 20071214; KR 20097013472 A 20071214; MX 2009007008 A 20071214; MY PI20092279 A 20071214; NO 20092774 A 20090727; NZ 57744307 A 20071214; NZ 59250907 A 20071214; NZ 59251007 A 20071214; NZ 60117507 A 20071214; PH 12014500902 A 20140424; PL 10191234 T 20071214; PT 10191234 T 20071214; RU 2009128979 A 20071214; SG 2011094588 A 20071214; SI 200731565 T 20071214; TW 102124491 A 20071225; TW 105115481 A 20071225; TW 96149840 A 20071225; UA A200907944 A 20071214; US 201314140698 A 20131226; US 201615003882 A 20160122; US 201715796368 A 20171027; US 52153307 A 20071214; ZA 200903633 A 20090526